COURSE SPECIFICATION

(Advanced Bacteriology)

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Programme for Postgraduate MD degree of Medical Microbiology and Immunology
(2) Department offering the programme:	Medical Microbiology and Immunology
(3) Department responsible for teaching the course:	Medical Microbiology and Immunology dep.
(4) Part of the programme:	Second part
(5) Date of approval by the Department`s council	7/8/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title:	Advanced Bacteriology
(8) Course code:	MIC 607AB
(9) Credit hours	2 Credit hours
(10) Total teaching hours:	30 h lectures.

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

To provide the candidate with

- recent approach for diagnosis of different bacterial infection
- recent mechanisms of antimicrobial resistance
- Role played by some bacteria in cancer development
- Pathogenesis of bacteria
- Therapeutic bacterial products
- sterilizing methods
- Emerging and reemerging bacteria

(2) Intended Learning Outcomes (ILOs):

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

A 1 Recognize how to solve problem of antibiotic resistance.
A 2 Describe the role of bacteria in oncogenesis,
A 3 Describe the endemic diseases caused by bacterial infection
A 4 Recognize the recent diagnostic methods for mycobacterium TB.
A 5 Elicit the pathogenesis of intracellular bacteria.
A 6 Elicit the problem of bacterial biofilm.
A 7 Recognize the ultra structure of bacteria
A 8 Elicit he role of bacterial enzymes in medicine
A9 Recognize the problem of emerging and reemerging bacteria

B1 analyze the biodynamics of disinfection.

B2 Interpret the results of antibiotic sensitivity testing

B3 Advice for further tests necessary to solve antibiotic

B4 Plan the laboratory investigations for the diagnosis of TB

B5 Identify bacterial biofilm and adhesion

B6 Formulate a policy on the use of sterilization and disinfection in the laboratory

B7 Assess degrees of urgency for the diagnosis of TB

B8 Assess advanced technology in autoclaves

B 9 Assess the role of different bacterial enzemes

B 10 Assess the role of bacteria in oncogenesis

(3) Course content:

Subjects	Lectures	Laborato	Field
Advanced technology for diagnosis of Mycobacterium tuberculosis	3 hours	–	–
Bacteria and oncogenesis	3hours		
Solving the problem of antibiotic resistance	3hours		
Bacterial endemic diseases	3hours		
Uses of bacterial enzymes in medicine	3hours		
Ultrastructure of bacterial cells	3hours		
Advanced technology in autoclaves	3hours		
Biodynamics of disinfection	3hours		
Intracellular bacteria	3hours		
Bacterial biofilm & adhesion	3hours		

(4) Teaching methods:

4.1: Lectures

4.2: Seminars

4.3: Attending workshops and conferences.

4.4: Observation of, assisting and discussion with senior medical staff

(5) Assessment methods:

5.1:Written exam for assessment of ILOs number; A 1- 9, B 1-10

5.2: MCQ: for assessment of ILOs number; A 1- 9, B 1-10

5.2: MCQ:

Assessment schedule:

Assessment 1: Final MD exam : after 6 semesters from the admission to the degree

Assessment2: MCQ: at the end of each smeester

Percentage of each Assessment to the total mark: (total microbiology course assessment)

Written exam:… 40 marks,

MCQ 10 marks

Other assessment without marks:

1-Candidate Logbook which should be fulfilled and signed by Head of the department.

1- Attendance Criteria: Minimum acceptance attendance is 75%

(5) References of the course:

6.1: Hand books: Department theoretical books & handouts given by lecturers

6.2: Text books:…

1. Topley and Wilson's Microbiology and Microbial infections. Volume 8, 2005,10th edition

2. Zinsser Microbiology-2001.

3- Color Atlas and Textbook of Diagnostic Microbiology: Elmer W Koneman – 2006, 6th edition

4- Microbiology and Clinical Practice: Shanson-1999, 3rd edition

6.3: Journals:

1. Clinical Microbiology Reviews
2. Journal of Clinical Microbiology
3. Journal of Medical Microbiology
4. Indian Journal of Medical Microbiology
5. Journal of Infection.

6.1: Websites:

1. Center for Disease Control -www.cdc.gov
2. World Health Organization- www.who.int
3. Infectious Disease Society of America- www.idsociety.org

1. **Facilities and resources mandatory for course completion:**
    1. Lecture halls.
    2. Data shows and computer assistance.
    3. Microbiology laboratory.
    4. Reagents for microbiological diagnosis.

Course coordinator: **Dr.**

Head of the department: **Prof. Dr. Mohammad Abou El-ela**

Date:

P.S. This specification must be done for each course.